



Transport Research Arena (TRA) Conference

Effective road safety measures in Greece

George Yannis^a, Alexandra Laiou^{a*}, Anastasios Dragomanovits^a, Dimitrios Nikolaou^a,
Eva Michelaraki^a, Katerina Folla^a, Marianthi Kallidoni^a,
Stratos Georgiopoulos^b, Manos Parissis^b

^aNational Technical University of Athens, 5, Heroon Polytechniou str., Zografou Campus GR-15773, Greece

^bMinistry of Infrastructure and Transport, 2 Anastaseos str. and Tsigante, Papagos, GR-15669, Greece

Abstract

The paper presents road safety actions and measures proposed in the framework of the development of the Greek Strategic Road Safety Plan for the period 2021-2030. Five road safety pillars that concern all road crash factors are outlined. For each pillar, actions and particular measures are defined, adapted to the Greek reality and based on the principles of Vision Zero and the Safe System Approach. In total, 44 actions and 200 road safety measures are foreseen and implementation priorities are defined. Next, the framework for monitoring the implementation of actions is presented, taking into account the elements of the Safe System Approach. The use of a set of key performance indicators for road safety is proposed and the methodological framework for the collection of the necessary data and the calculation of road safety performance indicators is provided.

© 2022 The Authors. Published by ELSEVIER B.V. This is an open access article under the CC BY-NC-ND license (<https://creativecommons.org/licenses/by-nc-nd/4.0>)

Peer-review under responsibility of the scientific committee of the Transport Research Arena (TRA) Conference

Keywords: policy; strategic plan; road safety programmes; implementation; monitoring

1. Introduction

Despite the significant progress achieved in road safety performance over the last decade, Greece, with 579 deaths in 2020, still lags far behind the European Union average. It is well behind the 14 oldest Member States, but also behind several newer Members and less developed countries. In order to effectively address the major social and national issue of road crashes, a new Strategic Plan for the improvement of road safety in Greece for the period 2021-

* Corresponding author. Tel.: +30-210-772-1380;

E-mail address: alaiou@central.ntua.gr

2030 was recently developed. The new National Road Safety Strategic Plan was based on international road safety developments, on the detailed analysis of the Greek conditions as well as on a systematic and broad public consultation. Furthermore, it is harmonized with the European Strategy that aims to reduce the number of deaths and serious injuries in road crashes by 50% by 2030, based on the year 2020, as well as with the general scientific, technological and social context as expressed by international road safety policies and strategies.

For the success of a Strategic Plan and the achievement of the objectives set in it, it becomes necessary to implement a road safety system, in which the responsibilities and the role of each implementing body are precisely defined and coordination, monitoring and evaluation of actions are effectively regulated. Among the main responsibilities of the road safety stakeholders that should be taken into account in the design of the Strategic Plan are:

- securing and allocating the necessary resources for the implementation of Road Safety Programs and actions,
- the coordination and control of all the implementers of the programs and actions,
- the coordination of communication and joint actions of the competent bodies,
- the creation of a system for monitoring and evaluating the results of programs and actions.

The National Road Safety Strategic Plan should lead to the definition, implementation and monitoring of the necessary actions to drastically reduce the number of road crashes and the number of dead and injured in them. Thus, one of the main components of the Plan was the identification of actions and measures to be undertaken at national level, by all competent bodies. This paper aims to present the procedure followed for the selection, prioritization, implementation, monitoring and evaluation of road safety measures in Greece in the framework of the Greek Road Safety Strategic Plan.

2. A road safety system for effective road safety measures

For the success of a Strategic Plan and the achievement of the objectives set in it, it is necessary to implement a road safety system in which the responsibilities and role of each implementing authority are defined, coordination, monitoring and evaluation of implemented measures are effectively regulated and road safety policy objectives and results are communicated to stakeholders and citizens.

The Road Safety Strategic Plan 2021-2030 is based on the following five pillars that address all road crash factors, as outlined in the United Nations Action Plan for the Decade 2021-2030:

- Road Safety Management
- Road User Behavior
- Road Infrastructure and Traffic
- Vehicle
- Post-Crash Treatment

For each of these pillars, actions and measures to be implemented by the competent authorities are specified following the principles of vision zero and the safe system approach. These actions and measures are based on international experience and are adapted to the Greek reality, with emphasis on the conclusions from the evaluation of previous Greek Strategic Road Safety Plans (effectiveness of measures, capabilities of implementing bodies, etc.). Emphasis was also given to the pillars and actions of the European Union Strategic Plan 2021-2030, in order to achieve the best possible harmonization.

An important contribution to the definition of the proposed actions and measures was achieved through an extensive, open consultation with public and non-public bodies. Through a dedicated interactive website any citizen or public body (public authority, private organizations and businesses, professionals, scientists, associations, NGOs) had the opportunity to be informed and submit comments and suggestions on actions to improve road safety in Greece.

All actions and measures will be implemented at national and regional or local level. Where required, the cooperation of multiple authorities is envisaged for their implementation (e.g. Ministries, General Secretariats of Ministries, Regional authorities, Municipalities).

All proposed actions must be governed by the principle of shared responsibility as it is a key parameter of the holistic approach to the development of a secure system that is the ultimate goal of the Strategic Plan. The principle of shared responsibility includes both ensuring the accountability of the State bodies for the effective execution of the task assigned to them as well as encouraging the adoption of safe road behavior by the citizens.

3. Selected road safety measures

In total, 44 actions and 200 road Safety Measures are foreseen. These actions and measures are distributed in the five Road Safety Pillars according to Table 1 below. Specifically, the Road Safety Management pillar includes actions for the formation of the required institutional and financial environment of road safety. The Road User Behaviour pillar concerns actions related to the safety of road users. Road Infrastructure and Traffic pillar targets actions to improve road safety infrastructure and traffic and the Vehicle pillar, actions to improve vehicle safety. Post-Crash treatment concerns actions related to the provision of immediate post-crash assistance to the victims and their medical care.

Table 1. Actions and Measures per Road Safety Pillar.

Pillar	Actions	Measures	
Road Safety Management (M)	M1. Integrated Road Safety Management Structure	M1.1 Governmental Committee M1.2 National Road Safety Body M1.3 Organization of Road Safety Units M1.4 National Road Safety Council M1.5 ISO 39001 Certification	
	M2. Road Safety Law	M2.1 Institutionalization of responsibilities M2.2 Institutionalization of accountability	
	M3. Road Safety Fund	M3.1 Function of Fund Management Authority M3.2 Road Safety Fund Revenue System M3.3 Budget Allocation and Execution	
	M4. Road Safety Observatory	M4.1 Collection of Crash data M4.2 Collection of Traffic data M4.3 Collection of Performance Indicators data M4.4 Collection of Perception data M4.5 Technical Analyses M4.6 Monitoring the progress of actions M4.7 Publication of Statistics and Results M4.8 International Rankings	
	M5. Road Traffic Code	M5.1 Comprehensive penalty policy M5.2 Settings for vulnerable road users M5.3 Codification of Legislation	
	M6. Infringement System Management	M6.1 Change of Legal Framework M6.2 Digital recording of traffic infringements M6.3 Organization of a Traffic Infringement Management Center M6.4 Driver Behavior Control System Automation M6.5 System for informing road users on violations	
	M7. National Road Safety Communication Policy	M7.1 Central ten-year road safety campaign M7.2 Annual thematic road safety campaigns M7.3 Special Communication Actions M7.4 Information campaigns in touristic areas M7.5 Collaboration with Mass Media	
	M8. Road Safety Action Plans	M8.1 Road Safety Action Plans in Municipalities M8.2 Road Safety Action Plans in Regions M8.3 National Road Safety Action Plan for Motorcycles M8.4 National Speed Management Action Plan M8.5 Road Safety Action Plan in Touristic Areas M8.6 Action Plan for the Adaptation to Automated Traffic	
	M9. Road Safety Research	M9.1 Interdisciplinary Road Safety Research M9.2 Research on automated traffic M9.3 Highlighting road safety research results	
	Road User Behaviour (B)	B1. Enforcement	B1.1 Systematic and targeted enforcement for road safety B1.2 Monitoring and publication of monitoring results B1.3 New Patrol Vehicles B1.4 Surveillance cameras B1.5 Equipment for alcohol and substances tests B1.6 Violation and crash recording equipment B1.7 Cross-border enforcement of sanctions
		B2. Driving Licenses	B2.1 Upgrading of driver training and examination system B2.2 Training and examination in hazard perception

	B2.3 Accompanied driving
	B2.4 Continuous training of professional drivers
B3. Driver Education/Training	B3.1 Continuing driver training programs
	B3.2 Training in new driver support systems
	B3.3 Training and performance assessment of professional drivers
	B3.4 Diagnostic (traffic-psychological) evaluation of offenders
	B3.5 Re-education of recidivist offenders
	B3.6 Training through simulation
B4. School Education	B4.1 Education programs for children (<12 years old)
	B4.2 Education programs - adolescent education
	B4.3 Train the trainer programs
	B4.4 Education programs for parents
	B4.5 Introduction of Traffic Education in Pedagogical Schools
	B4.6 Traffic Education Parks
	B4.7 Modernization of e-drive academy operation
B5. Information Campaigns	B5.1 Coordination of information campaigns of Public and Private Bodies
	B5.2 Systematic information campaigns
	B5.3 Public-Private Partnerships
	B5.4 Coordinated campaigns with enforcement and infrastructure actions
B6. Priorities for Driver Behaviour Improvement	B6.1 Speed management
	B6.2 Driver distraction
	B6.3 Driving under the influence of alcohol
	B6.4 Driving under fatigue
	B6.5 Violation of priority
B7. Protective Equipment Use	B7.1 Helmet
	B7.2 Safety belt
	B7.3 Child restraint systems
	B7.4 Safety equipment for bicyclists
B8. Telematics	B8.1 Promoting driver behavior monitoring using telematics
	B8.2 Compulsory insurance with telematics for specific categories of drivers
	B8.3 Telematics in fleet safety management
I1. Integrated Management of Mobility	I1.1 Metropolitan Agency for Mobility in Athens
	I1.2 Integration of Road Safety in Sustainable Urban Mobility Plans (SUMP)
	I1.3 Upgrade and staff public transport
	I1.4 Ensuring priority in public transport
I2. Speed limits revision	I2.1 Speed limit suitability check
	I2.2 30 km/h zones in urban centers
	I2.3 Reduction of speed limit to 80km/h in the rural network
	I2.4 Introduction of variable speed limits on motorways
I3. Speed management	I3.1 Infrastructure adaptation
	I3.2 Section control
	I3.3 Dynamic speed signs
I4. Road Safety Audit	I4.1 Digital Road Register
	I4.2 Road network safety assessment
	I4.3 Road Safety Audit on the Existing Rural Network
	I4.4 Road Safety Audit on the Existing Urban Network
	I4.5 Road Safety Audit on New Road Works
I5. Improvements in High Risk Sites on the Rural Road Network	I5.1 Marking
	I5.2 Safety barriers
	I5.3 Improvement of electric lighting
	I5.4 Roadside treatment
	I5.5 Assessment and improvement of visibility
	I5.6 Road pavement maintenance
	I5.7 Upgrading of signage, safety barriers, electric lighting, vegetation
	I5.8 Interventions at level train crossings
I6. Interventions on the Rural Road Network	I6.1 Road redesign
	I6.2 Modification of road cross-section
	I6.3 Redesign of intersections
	I6.4 Roundabouts
	I6.5 Leveling of intersections
I7. Large Scale Infrastructure Projects	I7.1 Upgrading roads to motorways
	I7.2 Creation of bypass roads of settlements
	I7.3 Preparation and implementation of tunnel safety plans
	I7.4 Undergrounding of railway lines in cities
I8. Interventions in the Urban Road Network	I8.1 Redesign of intersections
	I8.2 Roundabouts

	18.3 Widening of sidewalks
	18.4 Road pavement maintenance
	18.5 Upgrading of signage, safety barriers, electric lighting, vegetation
19. Traffic Calming Measures	19.1 Traffic Calming Measures
	19.2 20 km/h limit outside schools
	19.3 Upgrading of pedestrian crossings
	19.4 Creation of pedestrian roads
110. Pedestrian, Bicycle and e-Scooter Traffic	110.1 Creating infrastructure for bicycle traffic
	110.2 Configuration of intersections
	110.3 Special pedestrian crossing signage
	110.4 Update bicycle traffic rules
111. Road Safety Traffic Regulations	111.1 Improvement of signaling
	111.2 One-way roads
	111.3 Parking management
	111.4 Access control on highways
	111.5 Heavy vehicle traffic restrictions
	111.6 Creating overtaking lanes
	111.7 Management of adverse weather conditions
112. Road Works Management	112.1 Application of appropriate marking and signage
	112.2 Reduction of road works duration
	112.3 Proper restoration of road pavement
	112.4 Proper restoration of horizontal and vertical markings
	112.5 Driver information campaigns
113. Regulations	113.1 Updating and supplementing instructions and regulations
	113.2 Land use management
	113.3 Updating and supplementing urban planning regulations
V1. Vehicle Fleet Renewal	V1.1 Incentives for car fleet renewal
	V1.2 Incentives for commercial fleet renewal
	V1.3 Privileges for safe vehicles
	V1.4 Systematic updating of EuroNCAP results
V2. Vehicle Digital Identity	V2.1 Vehicle Technical Inspection Centers (KTEO) interconnection system
	V2.2 Integrated vehicle information system
	V2.3 Driver information system
V3. Vehicle Technical Inspection	V3.1 Systematic vehicle inspections
	V3.2 Special technical inspection of vehicles for tourism
	V3.3 Reliability check of vehicle technical inspection
V4. New active safety systems	V4.1 Driver warning systems
	V4.2 Driver support systems
	V4.3 Electronic Tachograph
	V4.4 Alcohol detector-key system
	V4.5 Installation of black box in all vehicles
	V4.6 Blind spot mirrors on trucks
	V4.7 Pedestrian / bicyclist detection sensors in trucks
V5. New passive safety systems	V5.1 New child restraint systems
	V5.2 Pedestrian protection systems
	V5.3 Motorcycle protection systems
V6. Regulations	V6.1 Implementation of European Directives and Regulations
	V6.2 Vehicle communication with other vehicles, infrastructure and users (V2X)
	V6.3 Implementation of Regulation for Transport of Dangerous Goods
	V6.4 Vehicle insurance check
V7. Fleet safety management	V7.1 Establishment of a vehicle fleet safety certification body
	V7.2 Promoting fleet safety systems in companies
	V7.3 Public Procurement only with certified companies
V8. Connected & Automated Vehicles	V8.1 Legislative adjustments for automated vehicles
	V8.2 Development of technological infrastructure for automated vehicles
	V8.3 Vehicle - Road Infrastructure (V2I) Communication
	V8.4 Automated Traffic Organization
P1. Intervention Time Reduction	P1.1 Promotion of the eCall system
	P1.2 Promotion of the 112 call
	P1.3 Response time performance indicators
	P1.4 Emergency Lane assurance
	P1.5 Organization of emergency vehicles in Motor Service Stations
	P1.6 Plans for the location of emergency intervention units

Post-Crash Treatment (P)	P2. Enhancing Emergency Response Units	P1.7 Development of a network of special rescue means P1.8 Air transport system organization P2.1 Adequate staffing of units with rescuers P2.2 Training of emergency response executives P2.3 New Fire Brigade Vehicles P2.4 New Fire Brigade Equipment P2.5 New Ambulances P2.6 New Ambulance Equipment P2.7 Creation of Mobile Medical Units
	P3. First aid driver training	P3.1 Training of candidate drivers in first aid P3.2 Lifelong education of all citizens in first aid P3.3 Driver training in crash management
	P4. Hospital Care Improvement	P4.1 Organization of emergency care units P4.2 Creation of Trauma Centers P4.3 Organization of a network of care centers P4.4 Multi-Injury Care Protocols (triage) P4.5 Blood Bank for the injured in road crashes
	P5. Establishment of Trauma Registry	P5.1 Development of an Electronic Trauma Register P5.2 Application of MAIS3+ protocol
	P6. Support of Road Crash Victims	P6.1 Establishment of rehabilitation centers for the injured P6.2 Psychological support for road crash victims P6.3 Training of judicial officers

All measures are analytically described in the final report of the National Road Safety Strategic Plan. In addition, for each measure the implementing Authorities have been identified (more than one Implementing Authority can participate in each Action) as well as the priority of implementation and whether or not a legislative regulation is needed for its implementation.

4. Prioritization of measures

Prioritization of measures was carried out taking into account the main causes of serious crashes and the institutional problems that exist in Greece as well as the estimated degree of influence in dealing with the main causes of crashes in Greece. A Delphi survey among road safety experts in Greece was also conducted. Specifically, the 200 road safety measures are distributed in high priority measures (81), medium priority measures (61) and low priority measures (58) as shown in Table 2 (using codes from Table 1).

Table 2. Road Safety Measures per Pillar and priority level.

Road Safety Pillar	High priority measures	Medium priority measures	Low priority measures
Road Safety Management	M1.1, M1.2, M1.3, M2.1, M2.2, M3.1, M3.2, M3.3, M4.2, M4.3, M4.5, M4.6, M5.1, M5.2, M6.1, M6.2, M6.3, M6.4, M6.5, M7.1, M7.2, M8.1, M8.2, M8.3, M8.4	M4.1, M4.7, M5.3, M7.3, M7.4, M7.5, M8.5, M8.6,	M1.4, M1.5, M4.4, M4.8, M9.1, M9.2, M9.3
Road User Behavior	B1.1, B1.2, B4.1, B4.2, B6.1, B6.2, B6.3, B6.4, B6.5, B7.1, B7.2, B7.3	B1.4, B1.5, B1.6, B2.1, B2.3, B2.4, B3.1, B3.2, B3.3, B3.4, B3.5, B4.3, B5.2, B5.4, B7.4, B8.1, B8.2, B8.3	B1.3, B1.7, B2.2, B3.6, B4.4, B4.5, B4.6, B4.7, B5.1, B5.3
Road Infrastructure and Traffic	I1.1, I1.2, I1.3, I1.4, I2.2, I3.1, I4.5, I5.1, I5.2, I5.3, I5.4, I5.5, I5.6, I5.7, I6.3, I6.4, I8.1, I8.2, I8.3, I8.4, I8.5, I9.1, I9.2, I9.3, I11.1, I12.1, I12.2, I12.3, I12.4	I2.1, I2.3, I4.1, I4.2, I4.3, I4.5, I5.8, I6.1, I6.2, I6.5, I9.4, I10.1, I10.2, I10.4, I13.1, I13.2, I13.3	I2.4, I3.2, I3.3, I4.4, I7.1, I7.2, I7.3, I7.4, I10.3, I11.2, I11.3, I11.4, I11.5, I11.6, I11.7, I12.5
Vehicle	V2.1, V2.2, V2.3, V3.1, V4.4, V4.6, V4.7, V6.1	V1.1, V3.2, V3.3, V4.1, V4.2, V4.3, V5.1, V5.2, V5.3, V6.4, V7.2, V8.1, V8.3	V1.2, V1.3, VI.4, V4.5, V6.2, V6.3, V7.1, V7.3, V8.2, V8.4
Post-Crash Treatment	P1.1, P1.2, P1.3, P1.4, P1.5, P2.1, P2.6, P4.4	P1.6, P2.5, P2.7, P3.1, P4.5	P1.7, P1.8, P2.2, P2.3, P2.4, P2.7, P3.2, P3.3, P4.1, P4.2, P4.3, P5.1, P5.2, P6.1, P6.2, P6.3

5. Methodology for monitoring the implementation of actions and performance

Monitoring road safety through the systematic and continuous recording and analysis of intermediate and final results as well as evaluating implemented interventions are essential steps for the effective management of road safety both nationally and locally. The methodological framework suggested in the Strategic Plan for monitoring the implementation of road safety actions and measures takes into account the elements of the Safe System Approach.

Therefore, a monitoring framework is proposed, which can be captured with a two-dimensional table. One dimension consists of the basic elements of the Safety System: a) Strong institutional framework, b) Shared Responsibility, c) Strengthening all parts of the system, d) Mitigation of the severity of crashes, e) Support safe behavior of road users. The second dimension comprise the five road safety pillars taken into account in this Strategic Plan: a) Road Safety Management, b) Road User Behavior c) Road Infrastructure and Traffic, d) Vehicle, e) Post-crash treatment. Each intersection cell of these two dimensions corresponds to the actions for the implementation of the Safe System.

The monitoring of the implementation of the actions and the Safe System can therefore be carried out per key element, pillar, individual cell, but also as a whole, since all these different elements are considered interconnected parts of an entire system. The degree of implementation of the safe system can be characterized depending on the type and the systematic or non-systematic implementation of the proposed interventions.

The Safe System Approach is also based on providing the clearest possible picture of the various issues affecting overall safety performance and taking timely action to reduce road crashes and injuries. In this context, it is proposed to use a set of key performance indicators for road safety, which are causally related to road crashes, fatal or serious injuries as well as to a number of important issues in the field of road safety:

- 1) Speed
- 2) Use of seat belts and child restraint systems
- 3) Use of protective equipment (helmet)
- 4) Driving under the influence of alcohol
- 5) Driver distraction
- 6) Vehicle safety
- 7) Infrastructure
- 8) Provision of post-crash medical care

The methodological framework for the collection of the necessary data and the calculation of road safety performance indicators is provided in the Strategic Plan. For the first five indicators, field surveys (measurements or observations along the road) are necessary for the collection of the required data. For the indicators of vehicle safety and post-crash medical care data are required from respective national databases. Concerning the infrastructure indicator, the development of an appropriate methodology by the European Commission is ongoing. Definitions of the indicators, the methodological framework for data collection and processing and the necessary minimum analysis requirements (by road type, time period, vehicle type, road user, etc.) are based on work already done by the European Commission, so that road safety performance indicators of Greece are harmonized with those of the other Member States.

6. Discussion

The National Road Safety Strategic Plan for the period 2021-2030 concerns the definition, implementation and monitoring of the necessary actions to drastically reduce the number of fatalities and injuries in road crashes in Greece. The development of the new National Strategic Road Safety Plan was based on all the new international trends, the detailed analysis of the possibilities of the Greek reality as well as the systematic broad consultation.

Initially the five road safety pillars of the National Strategic Road Safety Plan for the decade 2021-2030 that concern all factors of road crashes are presented. For each of the pillars, actions and individual road safety measures are defined, based on the principles of Vision Zero and the Safe System Approach and taking into account experience from other countries and directions of the European Union, specific road safety problems in Greece (motorcycles, speed, urban areas, etc.) and the expected influence on the achievement of the objectives set. Following, a description

of the measures and implementation priority are provided. In total, 44 actions and 200 road safety measures are foreseen, grouped per road safety pillar.

Next, the framework for monitoring the implementation of actions is presented, taking into account the elements of the Safe System Approach which are reflected in both the basic principles of the Strategic Plan and the actions and measures designed to improve road safety.

The Safe System Approach is also based on providing the clearest possible picture of the various issues affecting overall safety performance and taking timely action to reduce road crashes and injuries. In this context, the use of a set of key performance indicators for road safety is proposed and the methodological framework for the collection of the necessary data and the calculation of road safety performance indicators is provided.

Specifically, steps required to enable the monitoring of the implementation of road safety actions, through the National Road Safety Observatory include:

- Systematic collection of information for the implementation and implementation of the actions foreseen
- Reporting on the progress of the work of the competent implementing authorities to the head road safety authority (Road Safety Governmental Committee) every 6 months, through reports with detailed information on the technical and financial subject of all actions and measures
- Use of monitoring indicators, through which the percentage of implementation of the actions will be recorded, but also the effectiveness of the Implementation Principles in the redistribution of budgets will be evaluated in the next step.

Road safety performance should be monitored at national, regional and local level. In order to effectively monitor the performance of road safety, a series of quantitative indicators have been defined, which relate to:

- final results of road safety (crashes and victims)
- intermediate effects, related to the behavior of road users (speed, driving under the influence of alcohol, distraction, use of protective equipment), safety of infrastructure, vehicles and timely provision of post-crash care

The assessment of the effectiveness of road safety actions and measures, provides the necessary justification for each action and measure in terms of effectiveness and appropriateness and in relation to the respective general and specific quantitative targets that have been set. This assessment process includes four stages that concern:

- the collection of necessary data,
- the selection and implementation of appropriate methods and evaluation indicators for each category of actions and measures,
- the reliable application of assessment methods for specific areas and time periods,
- the publication and display of evaluation results.

Acknowledgements

The present research was carried out within the project “Preparation of a Strategic Plan for the measures / actions to be undertaken at national level by all competent bodies, for the improvement of the Road Safety of the country, during the period 2021-2030”, which has received funding from the Hellenic Ministry of Infrastructure and Transport under contract No 66/2021.

References

- Yannis G., Laiou A., Nikolaou D., Kallidoni M. (2022). Definition of Structure and Road Safety Programs. Deliverable 4 of the project "Preparation of a Strategic Plan for the measures / actions to be undertaken at national level by all competent bodies, for the improvement of the Road Safety of the country, during the period 2021-2030" commissioned to National Technical University of Athens by the Hellenic Ministry of Infrastructure and Transport.
- Yannis G., Dragomanovits A., Laiou A., Tsianos A., Folla K., Apostoleris K., Nikolaou D., Kallidoni M., Petraki V. (2022). Defining a road safety action plan. Deliverable 5 of the project "Preparation of a Strategic Plan for the measures / actions to be undertaken at national level by all competent bodies, for the improvement of the Road Safety of the country, during the period 2021-2030" commissioned to National Technical University of Athens by the Hellenic Ministry of Infrastructure and Transport.